EPA RISK ASSESSMENT TOOL INSTRUCTIONS AND KEY DEFINITIONS

INTRODUCTION: Building on progress made last year, we will incorporate risk assessments in our FY 2017 strategic reviews. This year our focus will be forward-looking—risk assessments will be based on EPA's FY 2018-2022 Strategic Plan revision, ensuring that our risk assessments will guide agency actions over the next four years, as well as provide the basis for EPA's Initial Risk Profile due to OMB this year. Headquarters office directors and lead region division directors will take the lead in completing risk assessments for strategic objectives in their areas of responsibility, this includes mission-support and research programs. This tool also will facilitate closer alignment with our management integrity work by identifying EPA's initial internal controls inventory.

INSTRUCTIONS:

STEP 1: IDENTIFY GOAL AND OBJECTIVE Provide the goal statement (*Row 2*) and the associated objective statements *(Row 3). Mission-support programs, please list all associated objectives under the goal (Row 3). Research, please list all associated objectives under the program (Row 3).* Also, please provide the names of the responsible Headquarters office director and division directors/lead region senior leaders completing the tool *(Row 4)* and the date of completion *(Row 5).*

STEP 2: GATHER DATA Headquarters ODs and regional DDs should consider all relevant and available information in identifying risks to achieving mission, mission-support, or research objectives. This involves taking into account FY 2016 performance results and progress for strategic goal objectives, risks identified during the FY 2016 strategic reviews, FY 2016 internal controls review results, prior year GAO and OIG findings, legal and compliance structures, inter-dependencies with other agencies, partner organizations, and outside organizations, stakeholder interests and priorities, interactions with Congress and the public, agency culture, and other external environmental factors.

STEP 3: IDENTIFY RISKS Headquarters ODs and regional DDs, supported by risk liaisons, will use this tool to identify *(Column A)*and describe the risks *(Column B)* to achieving each objective, both within and outside of the agency's direct control. Headquarters ODs and regional DDs will then use the drop-down options to identify the most prominent category (and secondary category, as appropriate) that best describes the risk (*Columns C and D, respectively). See category table below.*

STEP 4: ANALYZE RISKS Next, headquarters OD and regional DDs will consider the probability of the risk occurring *(Column E)* and the potential harm of the events, if they occur *(Column F)*, using the drop-down options (*See Likelihood/Impact table below).* Once the appropriate options for likelihood and impact are selected, the tool automatically calculates a risk score *(Columns G, H, and I)*and also generates a heat map *(Tab 3)* that visually plots each risk along a color grid ranging from green to yellow to red. Risks that fall in the green portion of the map suggest risks that have a lower likelihood of occurring and low impact; conversely, risks that fall in the red portion of the map suggest risks that have a higher likelihood of occurring and higher negative impact. Risk heat maps help senior leaders identify risks that require

STEP 5: RESPOND TO RISKS Headquarters ODs and regional DDs will identify the most significant actions to address the risks *(Column J).*

STEP 6: IDENTIFY INTERNAL CONTROLS Headquarters ODs and regional DDs, working with risk liaisons and management integrity advisors, will identify key internal controls that support the actions, as appropriate *(Column K),* as well as state whether the control is currently in place *(Column L).* Identifying key controls is an important step in the risk assessment process—effective controls can reduce the likelihood of a risk materializing and the impact. The internal controls identified as part of strategic review risk assessments will help establish the initial internal controls inventory associated with EPA's FY 2018-2022 Strategic Plan revision and the focus of future internal control reviews. It is important to note that not all risks will lend themselves to internal controls, particularly those risks that are outside the control of EPA.

KEY DESCRIPTIONS OF RISK CATEGORIES AND LIKELIHOOD/IMPACT RANKINGS

Risk Category Type		Risk Category Description
Strategic Risk Risk that would prevent an area from accomplishing its objectives (meeting the mission).	**Reputational Risk**	The risk that the organization's business practices, behaviors, or decisions do not align with EPA's core values, which could adversely impact the confidence and trust of internal or external stakeholders of the EPA. Stakeholders include: Congress, OMB, employees, the public, and others.
	Management Risk	Risk that the EPA's management practices will impact its ability to meet mission goals and objectives.
Operational Risk Risk of direct or indirect loss or other negative effects to an entity due to inadequate or failed internal processes arising from people, systems, or from external events that impair those internal processes, people or systems.	**Technological Risk**	The broad risk associated with advances in technology and impacts to operations.
	Resource Management Risk	The risk of EPA's effectiveness, reliability, or quality of our products and services, due to how the organization manages key business processes.
	Hazard Risk	The risk that employee or organizational attitudes, conduct or lack of awareness of hazards could impact the protection of lives and property, and hinder efforts to prevent accidents and incidents. The risk that EPA will experience loss of critical functions caused by natural disasters or hazards.
Reporting Risk		The risk associated with the accuracy and timeliness of information needed within the organization to support decision making and performance evaluation, as well as, outside the organization to meet standards, regulations, and stakeholder expectations.
Compliance Risk		Risk of failing to comply with applicable laws and regulations and the risk of failing to detect and report activities that are not compliant with statutory, regulatory, or organizational requirements. Compliance risk can be caused by a lack of awareness or ignorance of the pertinence of applicable statutes and regulations to operations and practices.

Analyze Risks

Likelihood	Impact
(1) Very Low: Risk event occurrence is **remote**. Likelihood of occurrence is **0-10 percent**.	**(1) Very Low:** Risk event is **negligible** and not expected to significantly affect performance of key function(s).
(2) Low: Risk event **unlikely** to occur. Likelihood of occurrence is **10-25 percent**.	**(2) Low:** Risk event is **minor**. It is noticeable and may affect performance of key functions.
(3) Moderate: Risk event **possible** to occur. Likelihood of occurrence is **25-50 percent**.	**(3) Moderate:** Risk event is **moderate** with material impact on performance of key functions.
(4) High: Risk event highly **likely** to occur. Likelihood of occurrence is **50-90 percent**.	**(4) High:** Risk event is **major** requiring immediate escalation or management intervention to reach required levels of performance of key functions.
(5) Very High: The risk event is almost **certain** to occur. Likelihood of occurrence is **90-100 percent**.	**(5) Very High:** Risk event is **severe** impacting our ability to meet one or more strategic goal, objective, produce key deliverables, or reach required levels of performance to meet the mission.

Goal Statement:	Goal 3 - Rule of Law and Process: Administer the Law, as Congress intended, to refocus the Agency on its statutory obligations under the law
Objective Statements:	Objective 3.2 - Prioritize Robust Science: Refocus the EPA's robust robust research and scientific analysis to inform policy making
Tool Completed By:	ORD, with input from Region 4
Tool Date Completed:	Wednesday, August 02, 2017

Risk Identification				Risk Analysis		Risk Calculation (Auto-			Risk Response	Internal Controls	
Risk	Risk Description	Risk Type	Secondary Risk Type (if applicable)	Likelihood	Impact	Likelihood Score	Impact Score	Overall Risk Score	Actions to Address Risk	Internal Controls	Internal Controls in Place?
Category: Sustainable workforce	ORD's ability to sustain its workforce and retain expertise is at risk due to anticipated retirements in mission critical positions. ORD's current ability to backfill positions will be essential for the organization, but it is limited. Because of these anticipated retirements, ORD is at risk of losing institutional knowledge and maintaining working relationships with internal and external partners. Staffing levels in specific scientific disciplines are currently inadequate to meet the needs of the research and assessment efforts and the product production schedules required by the Agency and other clients. In addition, the agency's Title 42 Authority expires in FY 2020, presenting a risk to ORD's continuing ability to recruit and retain world class scientists and engineers.	Operational Risk	Strategic Risk	Very High	High	5	4	20	ORD leadership has been conducting succession planning exercises in order to identify anticipated gaps in expertise and anticipated or potential hires, including critical hires while considering overarching strategic directions, which are evolving to align with new Administration priorities. Additionally, ORD is focused on ensuring staff are adequately trained and have professional growth opportunities. Other actions include supporting cross-training opportunities and details to shadow pending retirees for critical positions, and using current staff expertise to provide science policy support in a manner that meets evolving priorities. Coordination with the HR Shared Services Center is critical as ORD utilizes multiple personnel options such as Pathways, fellowships, and details and expanding staff professional development initiatives to provide staff with opportunities for professional growth.	Human Resources provides routine updates on retirement eligibility dates and current staffing lists. Management examines staffing on a regular basis and updates lists of priority hires and staffing needs. Utilize innovative approaches to replace lost skills and meet ORD's research mission	Yes
Category: Finance & Resource Management: Environmental Services Assistance Team (ESAT) Funding (region 4)	ESAT contractors perform a number of critical roles and functions in the Regional Labs. With limited hiring opportunities over the past several years, ESAT contractors have filled the roles of bench chemists, QA, sample receipt, waste handling, field sampling support, sample tracking and many other essential functions. Loss of ESAT contractors would have serious impacts on the level of production in regional labs.	Operational Risk	Strategic Risk	High	High	4	4	16	Funding for ESAT Contract support is used effectively and efficiently in each region. Senior Leadership within each region has been made aware of the importance of this resource. Regional Science & Techology (RS&T) Directors are striving to increase awareness in HQ and to have some input into future budget decisions regarding contract monies.	Contractor use and performance is tracked carefully in each region by a qualified contracting officer. Contractor performance is also monitored closely by HQ.	Yes
Category: Finance & Resource Management: Financial Management	Unable to sustain financial and resource management due to inexperienced or untrained staff. Financial Transactions are processed inconsistent with federal appropriations law, and OMB and EPA financial policy directives. Funds are not allocated to the appropriate organizational unit, are over or under funded, or not committed in a timely manner impacting achievement of ORD's mission and research goals. Funds lost due to expiration, and misapplication of funds resulting in underfunding of ORD level priorities.	Operational Risk	Compliance Risk	Moderate	High	3	4	12	Recruit and Mentor staff with expertise in financial management. Multiple reviews throughout the FY, with an emphasis on end of year fund status.	Qualified expertise in the organization to address financial management. Ongoing reviews and reporting requirements.	Yes
Category: Finance & Resource Management: Budget Continuity/ Resource Uncertainty	Uncertainty of future budget profiles delay, reduce, and/or eliminate achieving program goals and objectives. Contractual support and extramural staffing (Post Docs) are put at risk, therefore impeding program planning and progress.	Strategic Risk	Operational Risk	Very High	Very High	5	5	25	ORD will continue to prioritize research efforts as outlined in the StRAPs in support of the Program Office. Regional Office and Stakeholder requirements.		No
Category: Finance & Resource Management: Extramural Resource Acquisition and Access	Delays in award of support contracts and other financial vehicles introduce uncertainty and research delays. Delays in procurements of goods and services impact ability to meet commitment and obligation funding requirements	Operational Risk	Strategic Risk	Moderate	Moderate	3	3	9	Improved budget execution plans and monitoring, including increased lead time for implementing funding vehicles (succession planning).	Plan acquisition needs in accordance with OARM's Procurement Action Lead Times (PALTs). Environmental Management System (EMS) guidance and review on all IOAA acquisitions. Expand ORD's SACO Safety-Net pilot program. Flexible peer review processes that incorporate: 1) use of established groups, 2) contractor-organized peer review panels, 3) face-to-face public meetings, and 4) intra-agency technical review and clearance processes.	Yes
Category: Metrics & Evaluation: Development of metrics to measure the productivity and output quality of ORD research	Unable to fully assess ORD's performance and progress based on current performance measures and other evaluation methods.	Strategic Risk	<select>	High	Moderate	4	3	12	The 2016 BOSC report recommended that ORD "develop measures of success for outputs and outcomes for each program area. This includes both quantitative indicators and qualitative information. These indicators should be easily measurable, track progress closely, and widely accepted by EPA, partners, stakeholders, and the decision makers." On going analysis and budgetary justification/impact of program funding and support as to the value and effectiveness of resource direction and utilization. Charge the BOSC with providing advice on how ORD's research programs can evaluate their effectiveness.	ORD as implemented workgroups to study and develop metrics in support of program measures	Yes
Category: Metrics & Evaluation: Programmatic/management Control Reviews	Risk of failing to detect and address activities that are not compliant with statutory or government-wide requirements.	Compliance Risk	Compliance Risk	Very High	Moderate	5	3	15	Need to conduct reviews that will either validate various programmatic and operational requirements are being followed or identify management control weaknesses. Enhance ORDs management review program, and integrate with ORDs policy management functions.	Under development.	No
Category: Metrics & Evaluation: Need for strategic planning - development and maintenance of a multi-year plan and supporting higher level policy documents.	Ensures collective understanding of priorities, leads to clarified constituent expectations, and promotes greater efficiencies and/or policy alignments.	Strategic Risk	Strategic Risk	High	High	4	4	16	Maintenance of existing documentation and control structure (IRMS reports, status of funds, unfunded needs process, etc).	Standard operating procedures. We are currently working on improved SOP development.	No
Category: Metrics & Evaluation: Environmental Compliance	Risk events that could result in the Agency failing to comply with environmental laws and regulations. Unable to assure compliance with EPA's Scientific Integrity Policy and Public Access Plan.	Compliance Risk	Operational Risk	Very Low	Moderate	1	3	3	Environmental Management Systems (EMS) are adequately documented and well understood by staff and management. There is a culture of compliance with the relevant laws, regulations, policies, and procedures to which the Agency subscribes.	Senior management promotes a culture of environmental compliance and supports oversight programs. Mandatory EMS training is conducted annually. An EMS website contains pertinent information regarding the program.	Yes
Category: Metrics & Evaluation: Quality Assurance	An inadequate quality assurance framework would not allow ORD to ensure that the products delivered are of the highest scientific quality. Improper or insufficient review of science (QA). risk events that could impact the quality or integrity of research from being implemented within ORD.	Compliance Risk	Strategic Risk	Low	High	2	4	8	Create appropriate policies procedures and documentation to support a robust quality system.	Programmatic umbrella QA Program Plans (QAPP) developed for ORD programs. Provide QA training on umbrella QAPPs by hosting focused meetings and following up sessions. Review of program products by QA Manager.	Yes

Category / Risk	Description	Risk Type 1	Risk Type 2	Likelihood	Impact	L	I	Score	Mitigation	Internal Controls	Accept?
Category: **Program and Organizational Management:** Human Subjects Research	Human Subjects Research failures to comply with regulations and policy, e.g., unapproved HSR is conducted, EPA loses its FWA, or EPA fails to revise its regulations.	Compliance Risk	Reporting Risk	Moderate	Moderate	3	3	9	Expertise to oversee program is available; EPA updates FWA and maintains program components; and EPA moves forward to align HSR regulations with government wide updates to common rule.	Active program efforts to educate EPA researchers and oversee program requirements; Workgroup to update regulations finishes work to align regulations.	Yes
Category: **Program and Organizational Management:** Processes for assessing and controlling toxic chemicals - highly complex	Highly complex review processes that delay the completion of work products and reduce their effectiveness. If these complex processes cause delays in product completion, products will not be delivered in time to be useful to clients across the Agency.	Operational Risk	Strategic Risk	High	High	4	4	16	Improved review procedures for the operations of major programs. Increased outreach to clients, inside and outside the Agency.	Flexible peer review processes that incorporate: 1) use of established groups, 2) contractor-organized peer review panels, 3) face-to-face public meetings, and 4) intra-agency technical review and clearance processes.	Yes
Category: **Program and Organizational Management:** Climate Change-Related Research on Human Health Effects	Capability to address the 2016 BOSC report reviewing the Air, Climate, and Energy Research Program recommended an " increased emphasis on climate change-related research on human health effects, such as those associated with wildfires, and environmental impacts modeling and recommends expanding climate change and air quality modeling research to include temperature and humidity."	Strategic Risk	<select>	Very High	High	5	4	20	Prioritize this research as part of the research planning process and assign sufficient resources		No
Category: **Program and Organizational Management:** Research to Support Attainment of the Existing NAAQS	The EPA Administrator has identified helping states to attain the NAAQS as a priority. ORD provides the measurement methods and models that enable states to assess compliance with the NAAQS and evaluate control strategies. The BOSC Subcommittee's recommendations also indicate that these activities should be a priority.	Strategic Risk	<select>	Very High	Very High	5	5	25	Maintain sufficient resources to continue the research activities to meet our statutory requirements and support states in attaining the NAAQS.		Unknown
Category: **Program and Organizational Management:** Regional Science Program and Evolving Priorities	ORD employees 10 employees who sit in EPA's 10 regional offices. These Superfund and Technical Liaisons (STLs) provide technical assistance to the regions on Superfund and other issues. While the program functions very effectively in its current form, there is an opportunity for it to evolve to meet changing agency priorities which emphasize superfund site cleanup as well as assistance to and partnership with states.	Strategic Risk	Operational Risk	Moderate	Moderate	3	3	9	Conduct an internal review of the STL program in light of evolving Administrator priorities. Develop concept proposal for a strategic direction for the program which addresses new priorities.	Each STL has a PARS agreement. ORD can modify the agreements as needed to reflect any changes in emphasis for the STL job to meet new Agency priorities.	Yes
Category: **Program and Organizational Management:** Managing priority changes in Agency's strategic plan FY18-22	Once finalized, EPA's strategic plan for FY 2018 - 2022 will most likely have updated priorities for areas of research. Management and communication of these changes will be important to ensure staff is aware of new Agency priorities.	Strategic Risk	Operational Risk	Low	Moderate	2	3	6	Management oversight and regular discussion during senior management meetings.	StRAP development process. MI weekly interactions with NPDs.	Yes
Category: **External Engagement:** Reliance on external peer groups	Reliance on external groups to participate in research and assessment activities and/or to conduct scientific review of products, could jeopardize productivity and limit ORD's ability to meet it objectives. If external bodies are unavailable or unable to participate, this would limit our ability to deliver products. Review of the Air, Climate, and Energy Research Program by independent experts provides critical input to the development and implementation of the program. This has typically been done through the Board of Scientific Counselors.	Operational Risk	Strategic Risk	Moderate	High	3	4	12	Comprehensive project planning and management processes that can react to changes in availability. Increased outreach to cooperators and clients, inside and outside the Agency. Establish a standing Subcommittee of the BOSC to review programs.	New assessment and update processes for major programs such as IRIS, ISA, and PPRTV. Regular interactions with scientists and managers in program offices, regions, the scientific community and other government agencies to establish priorities.	Yes
Category: **External Engagement:** Research expert retention and external program review	Ability to conduct expert review of research program by BOSC subcommittee is at risk due to procedural matters related to expiring terms of existing members that will delay having available subcommittee with required expertise and familiarity with a complex research program. High turnover will impact the quality, timeliness, and relevance of research guidance	Operational Risk	Strategic Risk	Moderate	High	3	4	12	Expedite application process for new BOSC members. ORD will introduce new BOSC members on program specifics and goals to help them become productive as soon as possible.		No
Category: **External Engagement:** Board of Scientific Counselors Program Management	The Board of Scientific Counselors (BOSC) provides objective, independent reviews of the design, implementation and effectiveness of ORD research programs. Members must be free from conflict of interest or the appearance of a lack of impartiality. Additionally, the Board must follow Federal Advisory Committee Act procedures. If proper controls are not in place, there is a risk of conflict of interest, appearance of a lack of impartiality, or of not following Federal Advisory Committee Act procedures.	Compliance Risk	Operational Risk	Low	Moderate	2	3	6	ORD has recently developed Standard Operating Procedures and a series of check lists for DFOs to use to ensure that everyone is knowledgeable of processes and that all applicable ethics forms and trainings have been completed before BOSC members participate in activities.	ORD has developed several internal controls to minimize the risk of conflict of interest, the appearance of a lack of impartiality, or not following Federal Advisory Committee Act procedures. Internal controls include: 1) Annual submissions by BOSC members (who are Special Government Employees) of EPA Form 3110-48, Confidential Financial Disclosure; 2) Annual internal review of EPA Form 3110-48 by the Designated Federal Officer (DFO) and Deputy Ethics Official; 3) Annual ethics training certifications by BOSC members; and 4) DFO remarks at the beginning of each FACA meeting to reinforce the need for members to recuse themselves from providing recommendations on any topics where they think they may have a conflict of interest or appearance of a lack of impartiality.	Yes
Category: **External Engagement:** Capacity to engage and communicate with the public	Implementation of social sciences as a means to engage with the public	Operational Risk	<select>	High	High	4	4	16	Integrate Social Sciences into the research portfolio.		Unknown
Category: **Facility & Equipment Management:** Cost of facility operations, equipment, and science	Risk events that could lead to an inadequate infrastructure to sustain operations and/or improper maintenance, restoration, or repair of the organization's facilities and assets. The cost of conducting cutting edge science has gone up over the past 20 years, and while the complexity of problems ORD must solve has increased, inflation has taken it's toll on our operational budget. Under the FY18 dramatically reduced president's budget the laboratory will be unable to meet agency science needs. Decisions will be required that either shut down ORD scientific research operations, or close one or more facilities. Under either scenario, hundreds of contract and/or federal staff with unique and specialized skillsets would need to be released. Clear priorities are needed to direct the workforce on focused limited achievable issues. This is a reputation and management risk.	Strategic Risk	Operational Risk	Moderate	Moderate	3	3	9	Infrastructure needs are adequately resourced by the Agency to meet needs. Infrastructure meets Agency's energy, environmental, and sustainability requirements. ORD will continue to evaluate its operations and identify any remaining operational efficiencies that lower operational costs while supporting environmental science priorities. ORD will also closely monitor the budget situation and define options for meeting an FY18 budget once enacted.	ORD complies with EO 13514 Federal Leadership in Environmental, Energy and Economic Performance and EPA's commitment to EMS. Management works closely with OARM to identify critical facility needs and carry out planned facilities consolidations. ORD will work to define and prioritize laboratory costs, and is a leader in the Agency's Laboratory Enterprise Forum.	Yes

Category	Risk Description								Controls/Actions	Existing Controls	
Category: **Facility & Equipment Management**: Capital Equipment Funding for Regional Labs (region 4)	If the capital equipment funding for the Regional Labs were to be decreased, it will impede the RS&T labs ability to continue providing quality environmental results. It is important that laboratories be able to replace equipment as it ages and to be able to keep current with new technological developments that allow them to provide analysis of emerging contaminants of concern. It is also important to be able to adopt new technology to enable the production of the highest quality environmental data possible.	Operational Risk	Strategic Risk	Very High	Very High	5	5	25	As in prior years, funding for capital equipment is carefully prioritized within each region and this process will continue. All equipment purchased is carefully selected to be the most effective, efficient and sustainable choice possible.	Management and purchasing officers provide careful review of all purchases. Managers work together to prioritize all equipment purchases and to ensure that equipment is well maintained. Property Officers track all purchases & disposition. The Lab Enterprise is currently conducting a national survey of lab equipment to look for any efficiencies that may be gained by sharing equipment between regions, programs, and ORD.	Yes
Category: Health and Safety	Risk events that impair the work environment and compromise the physical safety of employees.	Operational Risk	Compliance Risk	Low	Moderate	2	3	6	There are sufficient Occupational Safety and Health administrative controls and subsequent training (written regulatory program such as Chemical Hygiene, Blood borne Pathogens, Confines Space Entry, Occupant Emergency Plans, Continuity of Operations Plans project specific safety plans, etc.). There are appropriate workplace inspections, audits, and program reviews, and management support to correct findings.	Written regulatory plans, such as chemical hygiene, occupant emergency, blood borne pathogens are required before operation of a laboratory. In addition, new hire, annual and refresher H&S training are required for individuals working in the laboratories. COOP plans exist and personnel receives annual training on the plan. Laboratory safety audits are conducted internally by SHEMFS and externally by EPA-HQ. Findings of deficiencies are promptly addressed by management.	Yes
Category: Records Management	Records management program and policies are not well understood by staff. ORD staff do not appropriately apply record keeping strategies to their data and other types of information.	Strategic Risk	Reporting Risk	Very High	Moderate	5	3	15	The ORD Records Program Manager monitors related training completions to ensure that annual training requirements are met. Monthly ECMS usage reports are posted to ORD@Work for management and staff analysis of email records retained by each individual/organization. ORD records management website kept current. Training sessions with ORD's Records Management Lead. Mandatory records management annual training. Review of ORD's record keeping system. Make records management a higher priority by including in PARS agreements; Records liaison works with staff to determine records disposition and approach.	Federal records management policies and procedures. EPA records management policies and procedures. Records management website. Records management annual training. ORD records management staff engaged. Agency records management guidance. Control Correspondence Process. Make records management a component of performance management for staff.	Yes
Category: **Information Technology**: IT security, National Security Information (NSI) management	Budget cuts impact the ability to enhance IT infrastructure and support and sustain security controls and processes. An absence of or failure of IT security controls to ensure the protection of information housed on ORD's information systems.	Operational Risk	Compliance Risk	Low	Moderate	2	3	6	The Federal Information Security Modernization Act (FISMA) requires all Federal General Support Systems (GSS) and Major Applications (MA) to complete an independent annual risk assessment every year or after major changes to the GSS or MA have occurred. ORD monitors staff participation in the Agency's mandatory Annual Information Technology (IT) Cybersecurity Awareness Training and IT Security Role Based Training efforts to ensure compliance across ORD. OSIM has developed an inventory of all ORD applications, and processes and procedures to categorize the information within the applications to meet FIPS 199 to allow/permit the determination of major applications. SIO conveys budget priorities to ORD as needed.	Federal IT security policies and procedures. EPA IT security policies and procedures. IT security annual training. ORD SIO, CTO, PISO, Customer Support Representative, and support contractor staff engaged.	Yes
Category: **Information Technology**: IT hardware and software	Inability to rapidly adapt to and implement new IT solutions, both hardware and software. Budget cuts impact the ability to upgrade or maintain adequate IT environment.	Operational Risk	Strategic Risk	Low	Moderate	2	3	6	Broad network of federal and contract staff assigned to all segments of this activity. SIO conveys budget priorities to ORD as needed. Provision of training to improve skill sets with existing systems, emphasis on cross training to improve overall organizational readiness and abilities, and exploration of future trainings for staff at large and integration of these functions within existing work requirements (i.e., software acquisition and training for Qlik and other analytic	Federal IT policies and procedures. EPA IT policies and procedures. ORD SIO, CTO, PISO, Customer Support Representatives, and support contractor staff engaged. Evaluation of software expertise and needed skillsets (i.e., programming reports) is under development.	Yes
Category: Public access to EPA funded research publications and data	ORD work products are not publically accessible on EPA website or other public websites to provide free public access to funded research publications and associated data.	Compliance Risk	Reporting Risk	Moderate	Moderate	3	3	9	Integrate reviews on use of Science Hub in senior management meetings. Develop reporting process for progress entering data in Science Hub.	Monthly Science Hub progress report.	Yes